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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|--------------------------|---------------------|------------------|
| 10/550,847   | 09/23/2005  | Enzo Domenico Casagrande | 310.1062            | 6021             |
| 20311  | 7590        | 03/24/2010               |                     |                  |
| LUCAS & MERCANTI, LLP<br>475 PARK AVENUE SOUTH<br>15TH FLOOR<br>NEW YORK, NY 10016 |             |                          |                     |                  |
| EXAMINER   |             |                          |                     |                  |
| PURDY, KYLE A  |             |                          |                     |                  |
| ART UNIT   |             | PAPER NUMBER             |                     |                  |
| 1611   |             |                          |                     |                  |
| NOTIFICATION DATE  |             | DELIVERY MODE            |                     |                  |
| 03/24/2010   |             | ELECTRONIC               |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

**Office Action Summary****Application No.**

10/550,847

**Applicant(s)**CASAGRANDE, ENZO  
DOMENICO**Examiner**

Kyle Purdy

**Art Unit**

1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-55 is/are pending in the application.
- 4a) Of the above claim(s) 55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Application***

1. The Examiner acknowledges receipt of the amendments filed on 01/15/2010 wherein claims 30, 32, 34-40, 43-44, 46-52 and 54 has been amended.
2. Claims 29-54 are presented for examination on the merits. The following rejections are made.

### ***Response to Applicants' Arguments***

3. Applicants arguments filed 01/15/2010 regarding the objection of claims 34-54 made by the Examiner have been fully considered and they are found persuasive. This objection has been overcome by amendment to the claims.
4. Applicants arguments filed 01/15/2010 regarding the rejection of claim 30 made by the Examiner under 35 USC 112, second paragraph have been fully considered and they are found persuasive. This rejection has been overcome by amendment.
5. Applicants arguments filed 01/15/2010 regarding the rejection of claims 29 and 31-33 made by the Examiner under 35 USC 103(a) over Hyman (US 4161283) have been fully considered but they are not found persuasive.
6. Applicants arguments filed 01/15/2010 regarding the rejection of claim 30 made by the Examiner under 35 USC 103(a) over Hyman (US 4161283) in view of Geary et al. (US 2911756) have been fully considered but they are not found persuasive.
7. The rejection of claims 29-33 made by the examiner under 35 USC 103(a) is **MAINTAINED** for the reasons of record in the office action mailed on 08/20/2009.
8. In regards to the 103(a) rejection, Applicant asserts the following:

A) There is no teaching or suggestion anywhere in Hyman to combine both an insect attractant and control agent;

B) Hyman includes a removable barrier on their product, which is outside the scope of the instant invention; and

C) Hyman does not provide their article in the form of an elongate tape; and

D) Geary does not teach target zones as being spaced out at predetermined intervals along the product.

9. In response to A, Applicants argument is not found persuasive. While the Examiner acknowledges that Hyman fails to directly teach a structure with both an insect attractant and insecticide, any ordinary person would have readily envisaged such a structure. Column 4, lines 55-60 suggests that volatilizable substances for inclusion into the product include insecticides and insect attractants. It would have been obvious to any ordinary person to include both for at least the reason of enticing the insect to come to the tape material so that it will come in contact with the insecticide and die.

10. In response to B, the Examiner is perplexed by this argument. The transitional term 'comprising', is inclusive or open-ended and does not exclude additional, unrecited elements. See MPEP 2111.03. Thus, the instant claims do not preclude additional structural features, i.e. removable barrier, on the central claimed structure. Applicants argument is not found persuasive.

11. In response to C, Hyman does provide their structure in the form of an elongated tape. Figure 1 provides an image of their contemplated product. The description of Figure 1 is found at column 5, lines 45-50 wherein it is taught that Figure 1 is in the form of an 'elongated strip

comprising a plurality of articles. Moreover, the outer surface has a adhesive layer which enables bonding of the article to surfaces (see abstract). Taking all of these elements together teaches Applicants 'elongate tape' limitation. Applicants argument is not persuasive.

12. In response to D, Geary is not required to teach target zones being spaced out at predetermined intervals because Hyman provides such a structural limitation. Regardless, Geary does provide a motivation to space out the target zones as Geary teaches that the material can be perforated at predetermined lengths to facilitate detaching short pieces for use in combating insects. The role of Geary in the current rejection is to provide a suggestion of the elongate structure being in a roll. And as was noted in the previous office action, an ordinary person would be motivated to modify the elongate tape of Hyman in a roll because the result would provide the user with the convenience of regulating the amount of tape being dispensed and ergonomic benefit.

**Maintained Rejections, of Record**  
***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

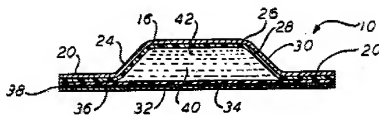
14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. **Claims 29 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; published 07/17/1979; of record).**

16. Hyman is directed to articles for dispensing of volatile agents. The system has the



following structure:

(see abstract).

The article is in the form of an elongate tape (see Fig. 1) with a plurality of target zones on the tape wherein the zones possess various volatile agents. Exemplified agents include insect attractants and insecticides (see column 4, lines 55-60). The dispensing structure is to have an impermeable backing layer (34), a insect attractant and insecticide layer in the form of a reservoir (42) and a permeable layer (28). The impermeable backing layer may be metal or polymer. The reservoir layer may be in the form of a semi-solid or solid when the volatile agents are mixed with a carrier material (see column 5, lines 50-55).

17. Hyman fails to expressly teach the article as dispensing both a insecticide and insect attractant.

18. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Hyman with a reasonable expectation for success in arriving at a structure for controlling sects in the form of an elongate tape wherein the tape possess various target zones comprising an insecticide and attractant reservoir. While it is

acknowledged that Hyman fails to specifically disclose the instant structure, i.e. a tape comprising an attractant and insecticide, it would have been readily obvious to any ordinarily skilled person to arrive to adjust Hyman so as to arrive at the instantly claimed invention.

Hyman suggests using their structures for controlling insects and suggests the use of attractants and insecticides. Thus, one would have had a reasonable expectation for success in controlling insect populations by manipulating the Hyman structure to include those agents. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**19. Claims 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29 and 31-33 above, and further in view of Geary (US 2911756; published 11/10/1959).**

20. Hyman fails to teach the tape material as being in a roll.

21. Geary is directed to insect combating devices. The devices are to be in the form of a tape. The tape includes a pheromone and an insecticide. The tape may be in a roll. It's taught that a roll can be perforated at predetermined lengths to facilitate the detaching of short pieces.

22. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman with Geary with a reasonable expectation for success in arriving at an elongated tape material in the form of a roll. One would have been motivated to structure the tape of Hyman in a roll because in doing so would provide the user the convenience of regulating the amount of tape to be used for controlling insects. Moreover, rolls are commonly used to save space. Therefore, the invention as a whole is *prima*

*facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**New Rejections, Necessitated by Amendment**  
**Claim Rejections - 35 USC § 103**

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

25. **Claims 34, 35, 40-42, 46 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; published 07/17/1979; of record).**

26. Hyamn is relied upon for disclosure described in the rejection of claims 29 and 31-33 under 35 U.S.C. 103(a).

27. Hyman also teaches that the impermeable layer is adjacent to the substrate, or that the substrate may be the impermeable layer of the laminate (see abstract). The structure comprises a central reservoir which is to contain the active volatile agents. The reservoir may be a liquid

semi-solid (gel) or a solid source (see column 2, line 25). It's taught that the active volatile agents are to be released from the tape material in a slow manner (see column 2, line 40).

28. Hyman fails to expressly teach the article as dispensing both a insecticide and insect attractant.

29. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Hyman with a reasonable expectation for success in arriving at a structure for controlling sects in the form of an elongate tape wherein the tape possess various target zones comprising an insecticide and attractant reservoir. With respect to the limitation of the insecticide and attractant being controlled release, this is taught by Hyman where in the release rate of the actives is 'slow'. It is the Examiners position that slow release is equivalent to controlled release. With respect to the state of the reservoir layer, a solid is obvious as Hyman explicitly suggests using a solid reservoir layer. Any ordinary person would have been motivated to use one, especially in view of the lack of reservoir options taught by Hyman (there were only two). Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**30. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29, 31-35, 40-42, 46 and 49-52 above, and further in view of Capizzi et al. (US 4879837; published 11/14/1989; of record, see IDS).**

31. Hyman fails to teach any specific chemical attractant. Moreover, Hyman fails to exemplify any impermeable polymer backing materials.

32. Capizzi is directed to devices for developing an attractive and toxic action for fighting insects. Capizzi teaches a fibrous type structure wherein the structure has an internal attractant reservoir surrounded by an impermeable layer and coated with an insecticidal ingredient. It's taught that suitable impermeable polymer to be used in coating the substrate includes polyesters and polyethylenes (see column 2, lines 60-65). Exemplified insect attractants include cis-8-dodecenyl acetate (see Example 2).

33. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman and Capizzi with a reasonable expectation for success in arriving at a elongated tape material comprising the attractant cis-8-dodecenyl acetate and wherein the tapes impermeable material comprise a polyester. It's noted that Hyman suggests using polymers for their impermeable layer, but fails to disclose any specific polymers. As such, it would have been readily obvious to any ordinary person to look to the art to identify known impermeable polymers for serve that function. Upon discovering the teaching of Capizzi and that polyesters are useful for the impermeability, one would have been motivated to supplement the teaching of Hyman with Capizzi with a reasonable expectation of imparting impermeability to the structure of Hyman. With respect to the use of attractant cis-8-dodecenyl acetate, this would also have been obvious to any person ordinarily skilled in the art. As Capizzi is directed to a similar endeavor as Hyman, i.e. manufacturing products with attractant/insecticidal activity, one would have been motivated to use the attractants taught by Capizzi and graft them into the teaching of Hyman with a reasonable expectation for similar

results. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**34. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29, 31-35, 40-42, 46 and 49-52 above, and further in view of Hyman (US 4285468; published 08/25/1981).**

35. Hyman fails to teach the reservoir layer as comprising hot melt or pressure sensitive adhesive such as polyvinyl chlorides.

36. Hyman ('468) is directed to articles for dispensing volatile agents, such as insecticides and attractants. The structure is similar that of Hyman 4161283 described above. The reservoir material of 468 may be in the form of a solid type material wherein the volatile substances are mixed with ethylene vinyl acetates or polyvinyl chlorides (see column 8, lines 45-50). It's taught that by mixing the volatiles with such polymers, greater control can be exhibited over the release of the volatile material.

37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman and Hyman (468) with a reasonable expectation for success in arriving at a structure with a reservoir comprising an attractant material mixed with a carrier material. One would have been motivated to formulate the volatiles agent such that it was mixed with a polyvinyl chloride because in doing so, the resultant material would allow for greater control over the release of the volatile substances within the reservoir. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the

time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**38. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29, 31-35, 40-42, 46 and 49-52 above, and further in view of Sengupta et al. (US 6248364; published 06/19/2001).**

39. Hyman fails to teach the reservoir as comprising a color indication means to confirm the distribution of the attractant.

40. Sengupta is directed to encapsulated products and their uses in modifying the behavior of animal species by use of pheromones. It's taught that it's generally convenient to include a dye with the pheromone mixture to determine the distribution of pheromone in the microcapsules (see column 9, lines 40-45)

41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman and Sengupta with a reasonable expectation for success in arriving at a attractant reservoir which comprised color indication to visually inspect for the presence of pheromone. One would have been motivated to include a color indication in the material of Hyman because in doing so would enable one to readily identify the material comprising the pheromone. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**42. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29, 31-35, 40-42, 46 and 49-52 above, and further in view of Yamaguchi et al. (US 6327811; published 12/11/2001).**

43. Hyman fails to teach the outer surface of the tape as having an adhesive material for adhering insects.

44. Yamaguchi is directed to a capturing device for insects. It's taught that by applying an adhesive layer to an outer surface is useful for immobilizing insects.

45. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman and Yamaguchi with a reasonable expectation for success in arriving at a tape material with an adhesive on the outer surface of the tape so as to immobilize insects that come into contact with it. One would have been motivated to apply an adhesive material to the outer surface of the tape taught by Hyman because it would ensure that the insects attracted to the pheromone would remain in contact with the insecticide present in the tape material. Thus, by adding the adhesive to the outer surface, the likelihood that the insect dies is greater. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

**46. Claim 48 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyman (US 4161283; of record) as applied to claims 29, 31-35, 40-42, 46 and 49-52 above, and further in view of Losel et al. (US 5707638; published 01/13/1998).**

47. Hyman fail to teach the amount of attractant in the reservoir layer. Moreover, Hyman fails to teach the system as being useful for attracting the codling moth, and subsequently killing the moth with lambda cyhalothin.

48. Losel is directed to insecticidal attract and kill formulations. The attractant is to be a pheromone and used in an amount of about 3% (see column 10, lines 40-50). The pesticide to be used may be that of lambda cyhalothin. It's noted that an exemplified pheromone is that of cis-8-dodecenyl acetate. Moreover, it's noted that the attract and kill compositions are useful against codling moths.

49. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hyman and Losel with a reasonable expectation for success in arriving at a system comprising 3% of an insect attractant and an insecticide that is useful for killing codling moths. One would have been motivated to use such an attract and kill composition because said composition it's indicated as being useful for such means. Any person could have readily selected to include a pheromone and lambda cyhalothin with a reasonable expectation for success in attracting and killing moths, especially in view of Losel direct suggestion of such. Thus, one would have had a reasonable expectation for success in combining Hyman and Losel and arriving at a system for effectively controlling insects (i.e. moths). Such a result would have been one of ordinary kill and common sense. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

***Conclusion***

50. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

51. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

52. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle A. Purdy whose telephone number is 571-270-3504. The examiner can normally be reached from 9AM to 5PM.

53. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau, can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

54. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Kyle Purdy/  
Examiner, Art Unit 1611  
March 15, 2010*

*/David J Blanchard/  
Primary Examiner, Art Unit 1643*